

AMENDMENTS TO THE CLAIMS

Please amend the claims as indicated hereafter. [Use ~~strikethrough~~ for deleted matter (or double square brackets “[[]]” if the strikethrough is not easily perceivable, *i.e.*, “4” or a punctuation mark) and underlined for added matter.]

1. (Currently amended) A system which controls power in a communication system, comprising:

a detector, said detector configured to detect a packetized digital communication signal associated with a transmitter unit in a communication device configured to transmit said packetized digital communication signal onto a telephony system subscriber loop, said detector configured to generate a control signal in response to the detection of said packetized digital communication signal; and

a transmitter power manager coupled to said detector and configured to receive said control signal, said transmitter power manager coupled to at least one element residing in said communication device,

such that when said detector detects said packetized digital communication signal and generates said control signal, said transmitter power manager provides power to said at least one element in response to said control signal, said element not having power prior to generating of said control signal.

2. (Previously presented) The system of claim 1, wherein said at least one element resides in a transmitter coupled to the subscriber loop.

3. (Original) The system of claim 1, wherein said at least one element resides in a transmitter signal generating circuit.

4. (Previously presented) The system of claim 1, further comprising a switchable device residing in said transmitter power manager, said switchable device responsive to said control signal, and such that said switchable device couples said at

least one element to a power supply in response to the detection of said packetized digital communication signal.

5. (Original) The system of claim 4, wherein said switchable device is a transistor, said transistor coupled to said detector such that said control signal actuates said transistor into a conducting state so that said at least one element is coupled to said power supply.

6. (Previously presented) The system of claim 1, further comprising:
a first switchable device residing in said transmitter power manager, said first switchable device coupled to at least one first element residing in said transmitter unit; and

a second switchable device residing in said transmitter power manager, said second switchable device coupled to at least one second element residing in said transmitter unit,
such that said first switchable device is responsive to said control signal such that said first switchable device couples said at least one first element to a power supply in response to the detection of said packetized digital communication signal, and such that said second switchable device is responsive to said control signal such that said second switchable device couples said at least one second element to said power supply in response to the detection of said packetized digital communication signal.

7. (Original) The system of claim 6, wherein said second switchable device couples said at least one second element to said power supply after a predefined delay time.

8. (Previously presented) The system of claim 1, further comprising:
a plurality of detectors, each one of said plurality of detectors configured to detect one of a plurality of packetized digital communication signals, each one of said plurality of packetized digital communication signals being uniquely associated with one of a

plurality of transmitter units residing in said communication device, and each one of said plurality of detectors configured to generate a control signal in response to the detection of said packetized digital communication signal; and

a plurality of transmitter power managers, each one of said plurality of transmitter power managers coupled to the corresponding one of said plurality of detectors and configured to receive said control signal from said detector, and each one of said plurality of transmitter power managers coupled to at least one element residing in the corresponding one of said plurality of transmitter units,

such that when one of said detectors detect said corresponding packetized digital communication signal and generates said control signal, said corresponding transmitter power manager provides power to said at least one element in response to the detection of said packetized digital communication signal.

9. (Original) The system of claim 8, further comprising a plurality of switchable devices, at least one switchable device residing in each one of said plurality of transmitter power managers, each one of said plurality of switchable devices responsive to said control signal associated with said transmitter power manager in which said at least one switchable device resides, such that said at least one element is coupled to a power supply in response to the detection of said associated packetized digital communication signal.

10. (Original) The system of claim 9, wherein at least one of said plurality of switchable devices is a transistor, said transistor coupled to one of said plurality of detectors such that said control signal actuates said transistor into a conducting state so that said at least one element is coupled to said power supply.

11. (Currently amended) A method for controlling power in a communication system, the method comprising the steps of:

detecting a packetized digital communication signal, said packetized digital communication signal being associated with a transmitter unit configured to transmit said packetized digital communication signal onto a telephony system subscriber loop;

generating a control signal in response to detecting the presence of said packetized digital communication signal;

providing said control signal to a transmitter power manager; and

actuating said transmitter power manager in response to said control signal such that power is provided to at least one element residing in said transmitter unit, said element not having power prior to generating of said control signal.

12. (Original) The method of claim 11, wherein said step of actuating said transmitter power manager such that power is provided to said at least one element further comprises the step of coupling said at least one element to a power supply with a switchable device.

13. (Original) The method of claim 12, wherein said switchable device is a transistor and wherein said step of coupling actuates said transistor into a conducting state so that said at least one element is coupled to said power supply.

14. (Previously presented) The method of claim 11, further comprising the steps of:

generating a second control signal in response to the absence of said packetized digital communication signal;

providing said second control signal to said transmitter power manager; and

actuating said transmitter power manager in response to said second control signal such that power is removed from said at least one element residing in said transmitter unit.

15. (Original) The method of claim 14, wherein said step of actuating said transmitter power manager in response to said second control signal further comprises the

step of uncoupling said at least one element from a power supply with a switchable device.

16. (Original) The method of claim 15, wherein said switchable device is a transistor and wherein said step of uncoupling actuates said transistor into a non-conducting state so that said at least one element is uncoupled from said power supply.

17. (Original) The method of claim 11, wherein said step of actuating said transmitter power manager in response to said control signal further includes the step of providing power to at least one element residing in a transmitter.

18. (Original) The method of claim 11, wherein said step of actuating said transmitter power manager in response to said control signal further includes the step of providing power to at least one element residing in a transmitter signal generating circuit.

19. (Currently amended) A method for controlling power in a communication system, the method comprising the steps of:

detecting presence of a plurality of packetized digital communication signals, each one of said plurality of packetized digital communication signals being uniquely associated with one of a plurality of transmitters each configured to transmit said packetized digital communication signal onto a unique telephony system subscriber loop;

generating a plurality of control signals in response to detecting the presence of said plurality of packetized digital communication signals, each one of said plurality of control signals being associated with one of said detected packetized digital communication signals;

providing each one of said control signals to one of a plurality of transmitter power managers, each one of said transmitter power managers being uniquely associated with one of said transmitter units; and

actuating each one of said transmitter power managers in response to the associated control signal being provided to the respective transmitter power managers,

wherein the transmitter power managers are actuated to enable power to be provided to at least one element residing in each of the respective transmitter units, said element not having power prior to generating of said control signal.

20. (Previously presented) The method of claim 19, further comprising the step of actuating each one of said transmitter power managers so that power is removed from said at least one element when said respective packetized digital communication signal is absent.

21. (Currently amended) A method for controlling power in a communication system, the method comprising the steps of:

coupling a plurality of detectors to a communication system;

coupling one of a plurality of transmitter power managers to each one of said plurality of detectors;

coupling each one of said plurality of transmitter power managers uniquely to one of a plurality of transmitter units each configured to transmit packetized digital communication signals onto a unique telephony system subscriber loop;

detecting one of said plurality of packetized digital communication signals, said packetized digital communication signal being uniquely associated with each one of said plurality of transmitter units; and

generating a control signal in response to the step of detecting said packetized digital communication signal and providing said control signal to the respective one of said plurality of transmitter power managers such that at least one element residing in said respective transmitter unit is provided power, said element not having power prior to generating of said control signal.

22. (Currently amended) A system for controlling power in a communication system, comprising:

means for detecting a packetized digital communication signal, said packetized digital communication signal being associated with a transmitter unit configured to

transmit said packetized digital communication signal onto a telephony system subscriber loop;

means for generating a control signal in response to detecting the presence of said packetized digital communication signal;

means for providing said control signal to a transmitter power manager; and

means for actuating said transmitter power manager in response to said control signal such that power is provided to at least one element residing in said transmitter unit, said element not having power prior to generating of said control signal.

23. (Original) The system of claim 22, wherein said means for actuating said transmitter power manager such that power is provided to said at least one element further comprises means for coupling said at least one element to a power supply with a switchable device.

24. (Original) The system of claim 23, wherein said switchable device is a transistor and wherein said means for coupling actuates said transistor into a conducting state so that said at least one element is coupled to said power supply.

25. (Previously presented) The system of claim 22, further comprising:
means for generating a second control signal in response to the absence of said packetized digital communication signal;
means for providing said second control signal to said transmitter power manager; and
means for actuating said transmitter power manager in response to said second control signal such that power is removed from said at least one element residing in said transmitter unit.

26. (Original) The system of claim 25, wherein said means for actuating said transmitter power manager in response to said second control signal further comprises

means for uncoupling said at least one element from a power supply with a switchable device.

27. (Original) The system of claim 26, wherein said switchable device is a transistor and wherein said means for uncoupling actuates said transistor into a non-conducting state so that said at least one element is uncoupled from said power supply.

28. (Original) The system of claim 22, wherein said means for actuating said transmitter power manager in response to said control signal further includes means for providing power to at least one element residing in a transmitter.

29. (Original) The system of claim 22, wherein said means for actuating said transmitter power manager in response to said control signal further includes means for providing power to at least one element residing in a transmitter signal generating circuit.

30. (Currently amended) A system which controls power to selected elements, comprising:

a communication signal transmitter system, said communication signal transmitter system further comprising:

at least one transmitter unit configured to transmit a packetized digital communication signal onto a telephony system subscriber loop;

at least one detector configured to detect said packetized digital communication signal associated with said at least one transmitter unit, said detector further configured to generate a control signal in response to the detection of said packetized digital communication signal; and

at least one transmitter power manager uniquely coupled to said at least one detector and configured to receive said control signal, said transmitter power manager coupled to at least one element residing in said at least one transmitter unit,

such that when said detector detects said communication signal and generates said control signal, said transmitter power manager provides power to said at least one

element in response to said control signal, said element not having power prior to generating of said control signal.

31. (Previously presented) The system of claim 1, wherein the transmitter in the communication device adheres to an Open Systems Interconnect (OSI) seven-layer model.

32. (Withdrawn) A method for facilitating compact construction of a communication system, comprising:

powering off at least one selected component in each of a plurality of digital communication system devices during periods of communication inactivity of that digital communication system device;

reducing heat generated from the powered-off selected component, the generated heat otherwise caused by power consumption of the component when powered;

detecting an incoming communication signal to one of the digital communication system devices, the detection corresponding to a period of communication activity;

powering the selected component during the period of communication activity;

powering off the selected component during subsequent periods of communication inactivity; and

compactly constructing the communication system by arranging the plurality of digital communication system devices in the communication system in proximity to each other, the compact construction permissible by the reduction in generated heat from the selected component during the periods of communication inactivity.

33. (Withdrawn) The method of claim 32, wherein a plurality of selected components are powered and powered off during periods of communication activity and periods of communication inactivity, respectively.

34. (Withdrawn) The method of claim 32, wherein compactly constructing the communication system further comprises providing at least one additional

communication system device in a per unit size of floor space, wherein the number of digital communication system devices previously limited by the total generated heat of the plurality of digital communication system devices may be increased due to the reduced generated heat in the powered-off plurality of selected components during the periods of communication inactivity.

35. (Withdrawn) The method of claim 32, wherein compactly constructing the communication system further comprises providing at least one additional communication system device in a per unit size of a cabinet volume, wherein the number of digital communication system devices previously limited by the total generated heat of the plurality of digital communication system devices may be increased due to the reduced generated heat in the powered-off plurality of selected components during the periods of communication inactivity.

36. (Withdrawn) The system of claim 1, wherein said transmitter power manager powers down said at least one element when an absence of said packetized digital communication signal is detected, thereby reducing generated heat from said powered-down element, said generated heat otherwise caused by power consumption of said element when powered, and wherein a compact construction of a communication system having a plurality of said communication devices is permissible by said reduced generated heat from the powering down of said element during absence of said packetized digital communication signal.

37. (Previously presented) The method of claim 11, further comprising:
powering off said element residing in said transmitter unit before the detecting of said packetized digital communication signal;
reducing generated heat from said powered-off element, said generated heat otherwise caused by power consumption of said element when powered;
detecting an absence of said packetized digital communication signal;

powering off said element in response to detecting said absence of said packetized digital communication signal; and

again reducing generated heat from said powered-off element, said generated heat otherwise caused by power consumption of said element when powered.

38. (Withdrawn) The method of claim 37, further comprising compactly constructing said communication system, said communication system comprising a plurality of said transmitter units, said constructing made permissible by said reduced generated heat from said powered-off element during said absence of said packetized digital communication signal.

39. (Previously presented) The method of claim 19, further comprising:
powering off said elements residing in said transmitters before detecting presence of said packetized digital communication signal;
reducing generated heat from said powered-off elements, said generated heat otherwise caused by power consumption of said elements when powered;
detecting an absence of at least one of said packetized digital communication signals;
powering off said associated elements in response to detecting said absence of said packetized digital communication signal; and
again reducing generated heat from said powered-off elements, said generated heat otherwise caused by power consumption of said elements when powered.

40. (Withdrawn) The method of claim 39, further comprising compactly constructing said communication system by arranging a plurality of communication devices therein, said communication devices comprising a transmitter, wherein said compact system construction is made permissible by said reduced generated heat from said powering off of said elements during said absence of said packetized digital communication signal.

41. (Withdrawn) The method of claim 40, wherein compactly constructing said communication system comprises providing additional communication devices in a per unit size of floor space, wherein said number of communication devices previously limited by said total generated heat of said plurality of communication devices may be increased due to said reduced generated heat in said powered-off plurality of selected elements during said absence of said packetized digital communication signal.

42. (Withdrawn) The method of claim 40, wherein compactly constructing said communication system comprises providing additional communication devices in a per unit size of a cabinet volume, wherein said number of communication devices previously limited by said total generated heat of said plurality of communication devices may be increased due to said reduced generated heat in said powered-off plurality of selected elements during said absence of said packetized digital communication signal.

43. (Withdrawn) The system of claim 22, further comprising:
means for powering off said element residing in said transmitter unit during an absence of said packetized digital communication signal, thereby reducing generated heat from said powered-off element, said generated heat otherwise caused by power consumption of said element when powered; and
means for powering off said element during subsequent absence of said packetized digital communication signal, thereby facilitating compact construction of a plurality of communication devices into said system, each of said plurality of communication devices having said element of said transmitter unit, wherein said compact construction is made permissible by said reduced generated heat from said powered-off element during said absence of said packetized digital communication signal.

44. (Withdrawn) The system of claim 30, wherein said transmitter power manager powers down said at least one element when an end of said packetized digital communication signal is detected, thereby reducing generated heat from said powered-

down element, said generated heat otherwise caused by power consumption of said element when powered, and wherein a compact construction of a plurality of communication devices into a system, said communication device having said element of said communication signal transmitter system, is made permissible by said reduced generated heat from said powering down of said element when there is no detected packetized digital communication signal.